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ABSTRACT

To obtain user evaluations of the information analysis products (IAPs) produced by the Educational Resources Information Center Clearinghouse on Tests, Measurement, and Evaluation (ERIC/TM), subjects were randomly drawn from a 1976 list of the clearinghouse's IAP orders. The sample was stratified by the title requested and the following institutional affiliations: (1) commerical organizations; (2) state departments of education; (3) elementary through high schools, including vocational schools; (4) school districts; (5) universities and four-year colleges; and (6) other. A questionnaire was administered to determine the type of professional activity engaged in by the requestor; how the requestor became aware of the document; whether the requestor belonged to ERIC/TM's target population; receipt of the document; reading vs. scanning; and document quality and utility. Indicators of quality were document length, organization, writing, and format. Utility was judged according to the purpose for ordering the document, whether the document was passed on (if so, to whom and what for), and the document's impact on the requestor's subsequent work activities. User evaluations of ERIC/TM's products tend to be high and indicate that the publications are used as reference tools by educators to keep abreast of the literature. The questionnaire and resulting data are appended. (JAC)

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ERIC CLEARINGHOUSE ON TESTS, MEASUREMENT, & EVALUATION
EDUCATIONAL TESTING SERVICE, PRINCETON, NEW JERSEY 08540

EVALUATION OF USERS' RESPONSES TO THE INFORMATION ANALYSIS PRODUCTS OF THE ERIC CLEARINGHOUSE ON TESTS, MEASUREMENT, AND EVALUATION

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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by

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INTRODUCTION

The research dealing with the needs and uses of information has undergone change since the 1950's, taking three basic forms. The first form consists of examining users' characteristics and needs and their relationships to the types of information used; the second deals with theoretical approaches to information dissemination; the third type focuses on evaluations of existing information systems and their impact on the consumer and practitioner. The first type, which categorizes users' needs and relates them to characteristics of the users themselves, was used primarily from the 1950's until the mid-1960's and was largely concerned with the characteristics of the consumers of scientific and technological information. Martyn (1974), in a review of the development of user-needs-and-uses research, terms this type of research "broad-brush studies" and sees its general purpose as exploratory in that the desired end product was some quantification of information-gathering habits and needs in order to improve the quality of the information services being offered.

In reviewing such studies of information needs, Lin and Garvey (1972) delineate some of the factors

involved in accounting for differential information needs. Possibly, the most important factor influencing such needs is the type of work performed by the user, such as teaching or research. Although many individuals are engaged in both activities, they may be classified according to how they spend the majority of their time. Lin and Garvey point out that whether the person classifies him or herself as primarily teacher or researcher has an effect on the quantity, quality and form of the information needed. Because they are attempting to establish "priority of scientific discovery," researchers need both a large amount of information as well as more current publications than do teachers, who are involved in more applied work.

Another factor influencing differential information needs is whether the individual's work is basic or applied. In a study of the information uses of social scientists in Britain, Line, Brittain, and Crammer (1971) report that those people employed by educational institutes, who are doing more basic work, report more frequent use of abstracts than do those in more applied work in government settings.

The specific discipline in which the information user is involved is another factor affecting differential needs. In a comparative study of the communication systems within the physical and social sciences, Garvey, Lin, and Nelson (1970) report various differences between the two with respect to the operation of the elements of the

systems. In general, communication in the social sciences seems to be in the early stages of development in relation to the development exhibited by the physical sciences in that within social sciences, communication seems more random than systematic. The processing of information within the social sciences seems to be more time consuming, haphazard, and diffuse than in the physical sciences.

A fourth factor affecting differential needs, mentioned by Lin and Garvey, is the users' knowledge of the facilities and/or materials available. Studies evaluating the services of the Educational Resources Information Center (ERIC) have emphasized that one of the most important problems encountered by ERIC has been underutilization and lack of awareness by potential users of the availability of the services (Garvey, et al., 1970; Hoover, 1972; Wanger, 1972). Hoover (1972) cites various factors as causes of underutilization of the services offered by ERIC. Among those mentioned are lack of visibility, accessibility, and practical utility of the information, and a lack of information retrieval skills among educators.

The second basic form of research, concerned with information dissemination and users' needs and uses, is characterized by a more sociological approach which attempts to develop theories of information-processing behavior as opposed to simply describing such behavior. Paisley (1968) summarizes some of the questions brought

out by such an approach and includes among them the particular media chosen and the amount of effort associated with the information-processing behavior. This sociological approach emphasizes the need to take into account the various systems in which the information user is involved, such as the cultural, political and economic systems described by Paisley. By considering these information spheres, this research approach leads to a greater understanding of the "informal communication system."

Among the concepts used to analyze the informal communication systems is that of "invisible colleges." These colleges can be thought of as a group of prestigious researchers in a subfield of a science who know one another and share information informally. Garvey and Griffith (1968) have pointed out that this informal communication within an invisible college of results which are not published elsewhere tends to restrict availability of the information from younger researchers who have no such access.

Another group of studies in this sociological vein, performed by the Center for Research in Scientific Communication at Johns Hopkins University, investigated the role played by the various media used in scientific and technical communication (Garvey, Lin, Nelson, and Tomita, 1970). The first series of these studies dealt with the communication processes involved in the national meetings of various engineering, physical, and social science

societies. The authors provide a detailed description of the information-exchanging activities associated with papers presented at these national meetings using responses obtained from questionnaires submitted to the authors of the papers, the session attendants, and the requestors of the papers.

On the basis of the attendants', requestors' and authors' responses to these questionnaires, the authors of the study came to some judgment as to the effectiveness of the information exchanged at these meetings. The authors conclude that the participants view the national meeting as one of the last informal scientific communication media and wish to keep it so despite the increasing size of the meetings. The basic information-exchange function served by the meeting is to announce new scientific work and to allow a fruitful exchange of information after the paper presentation. Pointing out that the information dissemination by requested copy is more important to the active researcher than the same information later published in journals, the authors suggest that to provide increased and more effective communication, the societies themselves might be responsible for distributing the papers rather than leaving the responsibility to the author who might find him or herself too busy.

The sociological approach to information-processing and dissemination adds to basic knowledge but has little

effect on existing information systems and their designers. During the 1960's many innovations were made in the information systems, such as computerized storage and retrieval. Because these changes involved high levels of effort and costs, the primary area of interest in user studies switched from basic knowledge to evaluations of these new systems. Specifically, researchers became concerned with the impact of the information provided by these systems on the subsequent work of the users. The designers and managers of the many systems which were formed after the computer became an integral part of the information dissemination process wanted feedback on the users' evaluations of the information being processed; therefore, numerous studies were undertaken to guide and modify the operations of certain systems.

In one such study, Hall and her associates (1972) analyze users' evaluations of the services offered by Information Services in Physics, Electrotechnology, Computers and Control (INSPEC). The investigators found that, in general, users' reactions to and judgments of a service are based on subjective impressions related to such things as the physical appearance of the output. In a similar vein, Hall (1972) examined users' reactions to selective dissemination information services and found that, over a period of up to two and a half years, the users report increased confidence in being well informed, a reduction in the number of journals scanned by satisfied

users, and fewer visits to the library by selective dissemination information recipients. Therefore, in these studies it is shown that a successful system can have a positive effect on the behavior of the users.

Educational Resources Information Center (ERIC) is an information system which has been the object of much investigation. ERIC is a system that provides for the compilation and dissemination of current educational literature. A network of 16 clearinghouses has primary responsibility for the collecting and indexing of material to be included in the system. In addition to performing computerized searches on specific topics, each of the clearinghouses produces Information Analysis Products (IAP) which are summaries and bibliographies prepared on important topics intended to help those in education remain abreast of research. Various studies have focused on the effectiveness of ERIC and the services offered.

One such study is that by Garvey, et al. (1970), mentioned previously, which dealt with the role of the national meeting in scientific and technical communication. As part of their research, the authors investigated the use of ERIC by the authors, attendants, and requestors of meeting papers presented at the American Educational Research Association meeting. Their results indicate that in 1967 only 30% of the respondents in the survey had personally submitted a document to ERIC or had acquired a document from ERIC. Although the authors give no reasons

for such underutilization, two differences between users and nonusers that emerge are institutional affiliation and professional involvement. Users tended to be associated with nonacademic institutions and to be involved in applied research or development work while the nonusers tended to be associated with academic institutions and to be involved in basic research. The authors posit that the basic researcher participates in an information milieu which is more efficient than ERIC but that the typical applied user does not participate in this milieu and relies on ERIC to provide for his or her information needs. Another reason for such results might be lack of user awareness due to the fact that ERIC had been in operation only two years when the survey took place.

In a later survey evaluating products produced by the National Center for Educational Communication (NCEC), Wanger (1972) obtains more optimistic results for ERIC. The products evaluated by the author include Putting Research into Educational Practice (PREP) reports, Educational Materials Center (EMC) bibliographies, and the IAPs produced by the ERIC clearinghouses. Wanger points out that of the budgets submitted to the NCEC by the ERIC clearinghouses, 40 to 45% of them are for the IAP program.

The first part of Wanger's study is concerned with the degree to which educators were familiar with these products. The results of a random sample of 1,588 educators reveal that 87% of the respondents report familiarity

with the products. Specifically, they had either read, skimmed or were aware of the existence of at least one NCEC unit. In another part of the study, Wanger investigated users' evaluations of the products in terms of quality, measured in terms of coverage of the topic, up-to-dateness, format, clarity of writing, and thoughtfulness of discussion, and users' evaluations of utility, measured in terms of recipients' use of the product and the degree of usefulness, the comparative usefulness of the product, and the reported need and relevance of the information contained in the product. Results indicate that quality ratings were greater than the midpoint of the scale and that the IAPs were meeting the users' needs for information on a continuing basis and, to a lesser extent, they were meeting more urgent information needs. Users reported that the products were useful in problem-solving situations, such as planning activities, research design efforts, course work curriculum design, and application in the classroom with students. Also, 50% of the users reported passing along the information to others.

The problems faced by the ERIC system have been noted and recommendations for the future have been suggested both by Wanger (1972) and Hoover (1972). Hoover points out that the literature of education is of such high volume and is so weak in scientifically verified propositions and reliable program evaluations that syntheses of practical experience and research findings are rare.

Another problem associated with educational literature is its underutilization due to educators' reliance on face-to-face communication with colleagues, anecdotal information, and the advice of others. As mentioned previously, a lack of familiarity on the part of the target audience with the services offered by ERIC is also a problem. Hoover also points out that even among those familiar with ERIC, there seems to be some degree of dissatisfaction, which is reduced when the users employ competent information specialists as mediators between their needs and the ERIC data base.

Hoover sees some areas as being of special interest in future planning for ERIC. First, he states that the coverage of the literature should have no substantive gaps and that it should include fugitive literature which covers exemplary, innovative projects and practices. Also, he emphasizes concern with the practitioner/decision-maker clientele in that users need concrete answers to specific problems or a synthesis of information around the problem to help in their applied work.

Wanger (1972) also makes recommendations for both the ERIC system and for further evaluation studies. Her recommendations for the system are to develop improved alerting and announcement systems and to improve the product delivery system and/or intensity the educational program of how to obtain the products. Recommendations for future evaluation studies state that they should

include an assessment of the outreach of the product and that "a continuing evaluation program should be instituted, to provide the originating units with current feedback on NCEC products" (p. II-11).

In line with this second recommendation, the present research project is concerned with the users of the IAPs produced by the ERIC Clearinghouse on Tests, Measurements, and Evaluation (ERIC/TM). The project attempts to measure the users' evaluations of the IAPs in terms of various aspects of quality and utility, discussed below. In addition, comparisons are made between the perceived quality and utility reported by those affiliated with colleges and those in other institutions and organizations.[1]

METHOD

Subjects. The subjects of this project were comprised of those people who have requested information analysis products from the ERIC Clearinghouse on Tests, Measurements, and Evaluation. The sample was randomly drawn from a cumulative list of orders placed from January, 1976 to December, 1976 and was based on stratifications by title of requested report and institutional affiliation. Table 1 presents these data. The six institutional affiliations used for stratification were: 1) commercial organizations; 2) state departments of education; 3) elementary through high school, including vocational schools; 4) school district; 5) universities and four-year colleges; and 6) undifferentiated, those for whom it was impossible to assign a category. Looking

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Insert Table 1 about here

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at Table 1, one can see that the largest number of requests came from those affiliated with colleges and universities and the fewest came from those associated with commercial organizations. Based on the total number of requests, 8,420, 301 were chosen to be in the survey. The number within each institutional affiliation is entered into Table 1 in parentheses.

Questionnaire. The basic purpose of the questionnaire was to assess the requestor's evaluation of a particular document which she/he had ordered. Specifically, the areas covered include: 1) the type of institution or organization with which the requestor is affiliated; 2) the type of professional activities engaged in by the requestor; 3) the relationship between the above two demographic characteristics and the type of report requested; 4) how the requestors became aware of the document in question; 5) whether the requestors were the target population of the clearinghouse; 6) whether the requestors had received the requested document and, if so, the extent of reading they had done; 7) the quality of the document; and, 8) the utility of the document.

These last two questionnaire areas were comprised of various dimensions. Quality was judged on the length of the document, the organization, the writing, and the format. Utility was assessed according to the requestor's expressed purpose in ordering the product and the extent to which this purpose was fulfilled, whether the information in the information analysis product was passed on and, if so, to whom and in what form. Utility was measured also by asking the requestors to report any impact of the information on their subsequent work activities. Open-ended questions were also included to allow the respondent to report any special effects the information had on

his/her work and to provide any suggestions. See Appendix A-1 for a copy of the questionnaire used in the study as well as the cover letter which accompanied it in Appendix A-2.

Procedure. The first step was to organize the individual requests by report number and affiliation of the requestor. Following this, a sample of 301 was chosen based on a sampling fraction of approximately 1/28.

The questionnaires were then sent to the chosen sample along with a cover letter and a stamped envelope for returning the completed questionnaire. The cover letter explained that the researchers were studying evaluations of the information analysis products of the ERIC Clearinghouse on Tests, Measurements and Evaluations and that the questionnaires were being sent to a randomly selected group who had requested particular reports.

Analysis. To evaluate responses to the questionnaire, the first step involves a frequency analysis of the responses of those who report receiving the requested documents. This gives the overall evaluations of quality and utility. Also, the demographic characteristics, especially institutional affiliation, of those reporting not receiving the documents are investigated to reveal any differences between these people and those who report receiving the documents.

Additional analyses include the relationships between responses (e.g., institutional affiliation and

evaluations of quality and utility). Open-ended questions are subjected to content analysis to reveal any major categories in the answers.

RESULTS

Of the 301 questionnaires mailed, seven were returned due to their being undeliverable, or due to the death of the requestor or the requestor's moving, thus reducing the sample to 294. Of these 294 remaining questionnaires, a fairly high response rate of 50% (i.e., 149 respondents) was yielded.

The results of the evaluation questionnaire can be discussed based on some general categories: 1) whether the requestor received the document; 2) the demographic characteristics of the recipients; 3) how the recipient became aware of the document; 4) the respondent's work in the same area as the particular document; 5) judgments about the quality of the information analysis product; and, 6) the stated utility of the product.

The first topic evaluated deals with whether the respondent received the requested document and, if so, to what extent was it read. Of the 149 people returning the questionnaire, 99 reported receiving the particular information analysis product, 44 said they had not received the document, and 6 could not recall receiving the document in question.

The typical respondent receiving the requested document has a post-graduate degree in education and works

for either a university or for an elementary, secondary or high school. Specifically, 94.7% of the respondents who received the document have a post-graduate degree, with 46.3% having masters' degrees and 48.4% having doctorates. A large majority (46.5%) of the respondents have degrees in education, while only 13.1% have degrees in psychology and 10.1% have degrees in educational psychology. The final demographic characteristic tapped was the respondents' place of employment. As would be expected given the sample, the results indicate that more than a third of those receiving the information analysis products were affiliated with a university or four-year college (34.4%), while 30.2% of them were working in elementary, secondary, or high schools.

Table 2 shows the demographic characteristics of those receiving the documents and those who report not receiving them. Looking at this table, one can see that those who report not receiving the documents are not significantly different from the recipients. As is the case with the recipients, the largest groups are those affiliated with universities or colleges and those working in elementary, middle, or high schools.

Insert Table 2 about here

The third area of interest deals with how the requestor became aware of the particular documents. The majority (63.3%) report having seen the document

listed in an order form from ERIC/TM. This source was by far the most frequently cited as the next most frequently reported source, "having read the abstract in Research in Education," was mentioned by only 13.3% of those who listed their sources. Table 3 lists the sources of awareness and their reported frequency.

Insert Table 3 about here

The next category of information which the questionnaire covered is concerned with the requestors' work in the same area as the product in question. The majority of respondents (53.5%) cited doing research and development work or supervising such work and making decisions while the least cited work in the area was preparing an external document (e.g., journal article or report). Table 4 lists the respondents' work in the area represented by the document.

Insert Table 4 about here

The next section deals with the purpose for which the requestor ordered the document and his/her judgment as to how well these needs and purposes were fulfilled. There were three possible responses to each purpose listed: 1) relevant, did fulfill; 2) relevant, did not fulfill; and 3) irrelevant. The third category was included under the assumption that some requestors would order a document thinking it was related to a particular topic or

application of that topic, when, in fact, the report covered another area. It was hoped that this would differentiate those instances in which the paper covered the desired topic but did not fulfill the user's needs from those in which the actual topic was irrelevant to the desired topic. There seems to be evidence, however, that this third "irrelevant" category was not totally understood by the respondents and it will be left out of this report. The two most frequently cited purposes which were fulfilled were "to keep as a potential reference tool" and "to update knowledge in a familiar area;" while the least frequently cited fulfilled purposes were "to obtain an introduction to a new subject" and "to look up needed facts." Very few responded that the purpose for which they ordered the document had not been fulfilled. The most frequently cited unfulfilled purpose, "to find out who is working on what area or what problem," was cited by only 16.3% of those who checked this as one of their original purposes and involves only six respondents.

The quality of the particular information analysis product was judged on four dimensions: length, organization, writing, and format (i.e., physical layout, illustrations and typography). A few respondents did not fill in this portion of the questionnaire, stating that they had read only the abstract or had only scanned the document and did not feel qualified to respond. Of the

89 cases responding to the length dimension, an overwhelming majority (85.4%) judged the length to be "about right." Of the 88 people responding to the organization dimension, 94.4% judged the document as satisfactory or better (11.4% excellent, 33.0% more than satisfactory, and 50.0% satisfactory). The fewest number of people responded on the writing dimension, perhaps because a number of the documents were bibliographies and the question may have seemed somewhat irrelevant. However, of the 85 making such judgments, 95.3% found the writing to be satisfactory or better (20.0% very clear, 28.2% more than satisfactory, and 47.1% satisfactory). The last category, the format, was also judged to be of high quality with 33.0% judging the format to be helpful to reading and understanding and 31.8% finding it somewhat helpful. (See Table 5 for summary of results.)

Insert Table 5 about here

Utility was assessed along two other dimensions, along with fulfilled purposes and needs: 1) whether the respondent reported passing the information in the document along to others, if so, to whom and in what form; and, 2) whether they reported taking some sort of action as the result of coming in contact with the information in the document. Looking at Table 6, one can see that 46% of the respondents reported passing along some

information with 76% of these passing along the document itself. The second dimension, the impact of the information on the respondents' work, yielded very positive results with 58% of the people reporting such an impact. These data are also reported in Table 6. Most of those who cited some impact said they applied the information to some aspect(s) of their own work. These two dimensions, passing the information along and impact of the information, along with the results reported concerning informational needs and their fulfillment would seem to indicate that the information analysis products are serving an important purpose in the work of the respondents.

Insert Table 6 about here

The responses to open-ended questions are listed in the Appendices. Other sources of awareness of the requested document, listed in Appendix B-1, include other ERIC publications, a general knowledge of ERIC publications, and other information services. Appendix B-2 lists other work in the areas represented by the documents. As reported, the two general areas are applied work and administrative work. In addition, two respondents cited "classwork."

The purposes listed in the open-ended section of question 4 follow from the work areas listed above are reported in Appendix B-3. Finally, respondents' comments

on any special effects of the documents and their suggestions are listed in Appendices B-4 and B-5, respectively.

Comparisons of responses of college faculty and others. The data can be analyzed to investigate the differences among people's responses and evaluations of the documents. The major interests will be the relationships between certain demographic characteristics (i.e., highest degree, area of degree and institutional affiliation) and other aspects of the survey questionnaire. An interesting comparison is that between those affiliated with universities or four-year colleges and those working in elementary, middle or high schools.

A greater percentage of those affiliated with elementary, middle or high schools report reading the entire document (37.9%) than do those associated with universities and four-year colleges (30.3%). However, the pattern for both is the same with most people reporting scanning the document as was the case with almost all of the institutional categories. An exception to this is found in the state government category. Most of these people (57.1%) report reading the entire document rather than scanning the document, reading the abstract only or not reading the document or the abstract. This is based on a very small sample (n+&) and should be interpreted with caution.

There is a difference between those affiliated with colleges and those in the schools in how they became aware of the specific document. A large majority of those affiliated with the universities report having seen the title on an order form from ERIC/TM (71.9%) with each of the other sources mentioned by fewer than 10% of these respondents. This can be compared with the practitioners in schools of whom 13.8% mention having "read the abstract in Research in Education," and 62.1% report having seen the title on an ERIC/TM order form. However, the pattern remains the same for all institutional affiliation groups, with the most cited source being the ERIC/TM order form, followed by the Research in Education abstracts.

The third question in the survey, intended to assess the type of work done by the respondents in the same area as the document, would be expected to reveal differences for the basic researcher and the practitioner. Table 7 lists comparative data for the relationship between the institutional affiliation of the respondents and their work in the area. Those who work in universities and colleges are about equally divided into the categories of "conducting research or development work" (24.2%), "Supervising research and development work" (21.2%), and "teaching" (24.2%), with the remaining quarter distributed in the "preparing internal document," "preparing theses and dissertations," and "other" categories. Those

affiliated with elementary, middle and high schools, on the other hand, most frequently cite the "other" category (39.3%), "conducting research and development work" (21.4%), and "supervising research and development work" (25.0%) as their work. As mentioned previously, the "other" category was content analyzed to reveal the major work categories entitled "applied work" and "administration." The specific activities appropriate to those in schools are curriculum development, selection of appropriate tests and the work of school principals.

Insert Table 7 about here

Comparing the different institutional groups on the basis of the purposes for ordering the documents involves looking at the number of people who mention a specific purpose as fulfilled or unfulfilled on the fourth question of the survey in relation to the total number of people in that institutional category. As mentioned previously, the "irrelevant" category is not included in these analyses.

Those in colleges and universities and those in schools are similar in their most often cited purposes. The first for each is "to keep as a potential reference tool," with 22 of the 29 respondents affiliated with schools mentioning this and 29 of the 33 university people

mentioning it. This purpose is followed by "to update my knowledge in an area with which I am familiar," with nineteen of the people in schools mentioning this and twenty of those in universities mentioning it.

Evaluations of quality, judged on the length, organization, writing, and format of the document, are reported in Table 8 by institutional affiliation. Looking at this Table, one can see that those affiliated with universities judge the document as more satisfactory in length than do those in the schools, whose evaluations are distributed, to a greater extent, in the "somewhat long," "somewhat short" and "definitely too short" categories.

More positive evaluations by the university and college people than those in the schools are also seen in the "organization of the document" dimension, as can be seen in Table 8. Ninety-six percent of the university/college people judge the organization of the document as satisfactory or better compared with 89% of those in schools.

Insert Table 8 about here

Similar to these evaluations, the judgments made on the writing dimension by the university and college people tend to cluster more at the high end of the scale than do those made by the people in the schools. For

example, 33.3% of those in universities judge the writing as more than satisfactory while only 12.0% of those in schools chose this evaluation.

The final quality dimension taps the degree to which the format of the document assisted the reader in understanding and readability. People in universities found the format much more helpful than those in schools, with 42.9% of those in universities choosing the highest point on the scale as opposed to 22.2% of those affiliated with schools who made this response.

The next two questionnaire areas deal with aspects of the utility of the document and how they relate to the institutional affiliation of the respondent. The first aspect, passing the information in the document along to others, is reported by a greater percentage of those in the schools (48.3%) than those in universities and colleges (42.4%). For both, the most frequently cited mode of transferring the information is "passing along the document itself." This is true for all the institutional affiliation categories.

The second area of interest, the impact which the document has on the respondent's work, can also be thought of as an aspect of document utility. The comparison between the basic researcher and those in applied settings yields some differences. Those affiliated with universities cite a greater frequency of such impact (63.6%),

with the majority of these (57.7%) reporting that they have applied the information in the document to some aspect of their work. Fifty-five percent of the respondents affiliated with schools report taking some action as the result of reading the document. The most frequently cited actions are ordering a reference listed on the document and applying the information in the document to some aspect of the respondent's work activities.

Evaluations of document quality can be compared on the basis of the respondent's highest degree and the area of that degree. Comparing evaluations of document length for those with bachelor's, master's or doctorates yields no substantial differences. Evaluations of document organization do differ by the respondent's highest degree. Seventy-five percent of those with bachelor's rate the document as excellent or more than satisfactory in terms of organization as opposed to 41.1% of those with master's and 45.2% of those with doctorates who make such evaluations. Evaluations of the writing dimension differ very little as a function of the respondent's degree level. The final dimension, format, is rated lower by those with master's degrees, with 56.4% rating the format as helpful or somewhat helpful, than by those with bachelor's degrees or doctorates. Seventy-five persent of those with bachelor's degrees rate the format as helpful or somewhat helpful while 71.4% of the respondents with doctorates make such evaluations.

Evaluations of document quality by area of degree follow the same pattern throughout the dimensions. Those with degrees in psychology consistently rate the quality lowest; people with degrees in educational psychology rate quality highest and those with degrees in education or in other areas fall in the middle.

DISCUSSION

In assessing the users' evaluations of the information analysis products produced by the ERIC Clearinghouse on Tests, Measurements and Evaluations, the results of this survey indicate that the recipients of these reports find them to be of high quality and to be useful in their work.

Evaluations of the documents are extremely high. Although there are some small variations, with those people possessing post-graduate degrees and those with degrees in psychology evaluating the documents somewhat lower, in general, all the recipients found the documents to be satisfactory in terms of length, organization, writing and format.

In general, the respondents seem to indicate that they found the information in the documents useful in their professional activities. Very few people report being unsatisfied with the products in terms of fulfilling the needs and purposes for which they were originally ordered. On the other hand, many respondents found such needs fulfilled.

The fact that almost half of the respondents report passing on the information in the documents, with the

great majority of these passing on the document itself, also reflects well on the usefulness of the information analysis products in the users' professional activities. In addition, more than half of the respondents report some sort of impact which the information had on their work. These three facts, that the documents fulfill informational needs, that users pass on the information, and that there is a high frequency of reported impact, point to the conclusion that the information is highly useful to educators.

When reporting on the specific purposes for ordering the documents, the recipients cite "to update knowledge in a familiar area" and "to use as a potential reference tool" most often. Analyzing the data by institutional groups reveals the same two purposes as those most often cited by each group. The least frequently mentioned purposes, "to look up needed facts" and "to obtain an introduction on a new area" were found for the entire respondent group as well as for five of the seven institutional affiliation groups. The reason for these being infrequently cited might be the existence of other, more readily available, sources of information to perform these functions. Libraries with updated periodicals may be more convenient and useful in fulfilling more urgent information needs while the information analysis products may be more useful as sources of continuing educational research information.

The requestors' purposes in ordering the document are related to their work in the area. That is, the most often cited areas of work are conducting research and development work and supervising research and development work and decision making. To the extent that these are on-going processes in which educators have continuing interests, the most frequent purposes, "to update knowledge in a familiar area" and "to use as a potential reference tool" would seem logical for these types of work.

Another important result is the number of people who report either reading the entire document or scanning the document. Because this indicates rather extensive reading of the material, it would seem to add reliability to the respondents' judgments about the quality and utility of the information in the documents. Caution must be taken in interpreting any of the data in this survey, however. Although the response rate is higher than expected, it is possible that those who returned the questionnaires represent some biased sample.

This fact is especially important when interpreting the fairly high number of people who report not receiving the requested documents. It is possible that these respondents are not entirely representative of the total population of requestors. Discounting this, that fact that 29.5% of the respondents report not receiving the requested documents seems fairly high. Because the unfulfilled

requests are not for a certain group of information analysis products and these requestors are not an identifiable sub-group of the population, there seems to be no obvious reason for this result. Perhaps the most salient and logical explanation would be that the requests may have been received by the Clearinghouse after all copies of the requested documents had been distributed.

In summary, these information analysis products seem to be reference tools which are skimmed or read by educators to remain abreast of the voluminous material in the educational research area. Perhaps they are more closely examined when specific needs arise. In addition, the information in the documents seems to be applied to the educators' work, regardless of the particular area. Another important finding is the surprising similarity among the various sub-groups in terms of their overall high evaluations of the documents as well as their frequently cited utilizations of the information in their work. These products seem to be accomplishing their goals of providing educators with an overview of educational research as well as having an impact on their work.

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FOOTNOTE

[1] Although the funding for this research was provided by the Educational Resources Information Center Clearinghouses on Tests, Measurements and Evaluation, the opinions expressed in this document are not necessarily those of ERIC/TM.

Table 1

Number of Requests by Requestors' Affiliation

Requestor Affiliation	N = 8,420	(301)[a]
Commercial organization	199	(7)
State Department of Education	372	(14)
Elementary through High School	767	(29)
School District	1,096	(39)
Universities and Colleges	3,193	(112)
Undifferentiated	2,793	(101)

[a]Numbers in parentheses are those chosen for inclusion in the sample survey.

Table 2

The Demographic Characteristics of Recipients and Nonrecipients

	Recipients	Nonrecipients
Institutional Affiliation	Percent[a]	Percent[b]
Elementary/ High School	30	36
Junior/Community College	6	2
University/Four-Year College	35	31
Federal	7	7
State	3	2
Local Government	3	17
Other	16	5
Area of Degree	Percent[c]	Percent[d]
Educational Psychology	11	20
Education	52	55
Psychology	15	10
Other	22	15
Highest Degree	Percent[e]	Percent[b]
BA (BS)	4	5
MA (MS)	47	52
Doctorate	49	43

[a]N = 96; [b]N = 42; [c]N = 89; [d]N = 40; [e]N = 95

Table 3

Source of Awareness of Document

Source	Frequency[a]	Percent
Research in Education	14	
Colleague	6	
Order Form from ERIC/TM	64	
Computerized Search	8	
Elsewhere	8	
TOTAL	100	

[a] N = 97

Table 4

Recipients' Work in the Area Represented by the Document

Work Area	Frequency Percent[a]
Conducting Research and Development	33
Supervising Research and Development	22
Preparing Internal Documents (report, memo, etc.)	7
Preparing External Documents (journal article, etc.)	1
Preparing own Thesis or Dissertation	4
Teaching a Course	9
Other	24

[a]N = 98

Table 5

Recipients' Evaluations of Document Quality

Length		Organization		Writing		Format	
Scale Point	Frequency Percent[a]	Scale Point	Frequency Percent[b]	Scale Point	Frequency Percent[c]	Scale Point	Frequency Percent[b]
Definitely too long	0	Excellent	11	Very Clear	20	Helpful	33
Somewhat long	8	More than satisfactory	33	More than satisfactory	29	Somewhat helpful	32
About right	86	Satisfactory	51	Satisfactory	48	Did not affect	29
Somewhat short	5	Somewhat unsatisfactory	5	Somewhat unclear	3	Hindered somewhat	5
Definitely too short	1	Definitely unsatisfactory	0	Definitely unclear	0	Definitely hindered	1

[a] N = 88; [b] N = 87; [c] N = 84

Table 6

Evaluations of Two Dimensions of Document Utility

Passing Information	Frequency Percent[a]	Impact of Information	Frequency Percent[b]
Passed on document itself	80	Ordered reference listed in document	21
Summarized findings in a memo	2	Applied information to own work	54
Verbally discussed findings	9	Examined related documents not referenced	7
Other	9	Consulted with author(s) or persons(s) identified with document	18
TOTAL	100	TOTAL	100

[a]N = 45; [b]N = 57

Table 7

Relationship of Recipients' Institutional Affiliation to Work in the Area Represented by the Document

Institutional Affiliation	Conducting Research & Development Percent	Supervising Research & Development Percent	Preparing Internal Document Percent	Preparing External Document Percent	Preparing Thesis or Dissertation Percent	Teaching a Course Percent	Other Percent
Elementary through High School N = 28	21.4	25.0	7.1	3.6	3.6	0	39.3
Junior and Community College N = 6	33.3	16.7	16.7	0	0	0	33.3
University and Four-Year College N = 33	24.2	21.2	9.1	0	6.1	24.2	15.2
Federal Government N = 2	50.0	50.0	0	0	0	0	0

Table 7 (Cont'd.)

Institutional Affiliation	Conducting Research & Development Percent	Supervising Research & Development Percent	Preparing Internal Document Percent	Preparing External Document Percent	Preparing Thesis or Dissertation Percent	Teaching a Course Percent	Other Percent
State Government N = 7	57.1	28.6	0	0	0	0	14.3
Local Government N = 3	66.7	0	0	0	0	0	33.3
Other N = 16	56.3	12.5	6.3	0	6.3	0	18.8

Table 8

Relationship of Evaluations of Document Quality and the Institutional Affiliation of the Recipients

	Elementary/ High School Percent	Junior and Community College Percent	University and Four-Year College Percent	Federal Government Percent	State Government Percent	Local Government Percent	Other Percent
Length[a]							
Definitely too long	0	0	0	0	0	0	0
Somewhat long	14	0	4	0	29	0	0
About right	78	100	89	100	71	100	93
Somewhat short	4	0	7	0	0	0	7
Definitely too short	4	0	0	0	0	0	0
Total	100	100	100	100	100	100	100

Table 8 (Cont'd.)

	Elementary/ High School Percent	Junior and Community College Percent	University and Four-Year College Percent	Federal Government Percent	State Government Percent	Local Government Percent	Other Percent
Organization[b]							
Excellent	11	0	15	50	0	0	13
More than satisfactory	19	83	22	0	57	67	47
Satisfactory	59	17	59	50	43	33	33
Somewhat unsatisfactory	11	0	4	0	0	0	0
Definitely unsatisfactory	0	0	0	0	0	0	7
Total	100	100	100	100	100	100	100

Table 8 (Cont'd.)

	Elementary/ High School Percent	Junior and Community College Percent	University and Four-Year College Percent	Federal Government Percent	State Government Percent	Local Government Percent	Other Percent
Writing[c]							
Very clear	20	17	22	50	14	0	23
More than satisfactory	12	33	33	0	43	33	46
Satisfactory	64	50	41	50	43	67	23
Somewhat unsatisfactory	4	0	4	0	0	0	8
Definitely unsatisfactory	0	0	0	0	0	0	0
Total	100	100	100	100	100	100	100

Table 8 (Cont'd.)

	Elementary/ High School Percent	Junior and Community College Percent	University and Four-Year College Percent	Federal Government Percent	State Government Percent	Local Government Percent	Other Percent
Format[d]							
Helpful	22	33.3	43	0	50	0	43
Somewhat helpful	37	33.3	25	50	33	0	36
Did not affect	33	33.3	29	50	17	67	14
Hindered somewhat	4	0	3	0	0	33	7
Definitely hindered	4	0	0	0	0	0	0
Total	100	100	100	100	100	100	100

[a]N = 87; [b]N = 86; [c]N = 83; [d]N = 86

1. Have you received a copy of the requested document? __Yes. __No.

   If No, skip to question 10. If Yes, have you:

   __Read the entire document
   __Scanned the document
   __Read the abstract of the document
   __Have not read document or abstract

2. Prior to requesting a copy of the document had you:

   __Read the abstract in Research in Education
   __Informed of document by colleague (in own institution or other)
   __Seen the document listed on order form for ERIC/TM
   __Received the title in computerized search
   __Obtained information elsewhere (Please specify)_____
   _____

3. Please indicate your work in the same area(s) as the document:

   __Conducting research or development work
   __Supervising research or development work/decision making
   __Preparing internal document (report, memo, etc.)
   __Preparing external document (journal article, report, etc.)
   __Preparing your own thesis or dissertation
   __Teaching a course
   __Other (Please specify)_____
   _____

4. What was your general purpose(s) in requesting the document and to what degree did the document fulfill these information needs? Indicate as many as are applicable:

	Relevant; Did fulfill	Relevant; Did not fulfill	Irrelevant for purpose
(a) To obtain an introduction on a new subject			
(b) To find out who is working on what area or what problem			
(c) To identify relevant literature references in a new area			
(d) To up-date my knowledge in an area with which I am familiar			
(e) To look up needed facts			
(f) To keep as a potential reference			
(g) To use for stimulation and browsing			
(h) To use in other aspects of my work			

   (Please specify)_____
   _____
   _____
   _____

5. Please circle the description most accurate in describing your evaluation of the document in terms of quality:

(a) Was the document:

definitely too long	somewhat long	about right	somewhat short	definitely too short

(b) The organization of the document was:

excellent	more than satisfactory	satisfactory	somewhat unsatisfactory	definitely unsatisfactory

(c) The writing of the document was:

very clear	more than satisfactory	satisfactory	somewhat unclear	definitely unclear

(d) The format (physical layout, illustrations, typography) was:

helpful to readability and understanding	somewhat helpful	did not affect	hindered somewhat	definitely hindered

6. Did you pass the information in the document on to someone else?

___Yes. Colleague, Superior, Subordinate (Please circle) ___No.

If yes, did you: (Check all that apply)

__Pass on the document itself
__Summarize the findings in a memo
__Verbally discuss the findings in a memo
__Other. (Please specify):_____

7. After reading the document, did you do any of the following:

__Order reference listed in the document
__Apply the information to my own work activities (Please indicate areas as in question 3 above (a) through (g))
__Examine related documents not referenced
__Consult with author(s) or person(s) identified with the document
__Special effect on work (Please specify) _____
_____

8. Please indicate any special effects on your work:

9. Please indicate below any suggestions or elaborations on your answers:

10. Please name your highest degree, institution awarding it, date and area in which you received this degree:

Highest degree____. Institution _____Date_____
__Education Psychology
__Education (other than Ed. Psy.)
__Psychology (other than Ed. Psy.)
__Sociology
__Other (Please indicate) _____

What is your major place of employment?

__Elementary through high school
__Junior/Community college (Please specify department or major dept._____)
__4-Year colleger or university (Please sperify department _____)

Government Agency: ____Federal
____State
____Local
____Other (Please specify) _____

UNIVERSITY OF SOUTH FLORIDA
TAMPA • ST. PETERSBURG • FORT MYERS • SARASOTA

COLLEGE OF SOCIAL AND BEHAVIORAL SCIENCES
DEPARTMENT OF PSYCHOLOGY
TAMPA, FLORIDA 33620

813: 974-2492

September 6, 1977

Dear Colleague:

As part of the requirements for completing my Master's degree, I am investigating reactions to and evaluations of the information analysis products prepared by the Educational Resources Information Center (ERIC) Clearinghouse on Tests, Measurements, and Evaluations.

According to the records I have, you have ordered the title listed at the top of the enclosed questionnaire. I would greatly appreciate your taking a few minutes to fill out the questionnaire and include any other comments you may have concerning that report or other reports prepared by ERIC/TM. Your participation would be extremely helpful to me, as well as being a valuable source of information to ERIC/TM by providing them with feedback about their products and suggestions for any improvements.

Enclosed is an addressed, stamped envelope for returning the questionnaire. Thank you for your assistance.

Sincerely,

Susan E. Hensley
Research Assistant

SEH:hmb

Encl.

APPENDIX B-1

Other Sources for Familiarity with Document

List of ERIC publications and searches

ERIC/TM Newsletter

Resources at ERIC/TM known

National Association of Elementary School Principals

Principals' Information Service

APPENDIX B-2

Other Work in Area Represented by Document

Applied Work

program evaluation (3)

school psychologists

teaching children with learning problems

curriculum development

selection of appropriate tests (2)

research and development and evaluations - federal government

consulting work

Administrative Work

college testing office

management of information center

chairman of vocational education

screening candidates for City School Board

school principal (2)

librarian

providing research information to staff

Classwork (2)

APPENDIX B-3

Other Purposes Reported for Requesting Document

Research and Development and Evaluations

Librarian

Research for staff - school and community college

Consultant to State Department of Education

Provide information to staff

APPENDIX B-4

Respondents' Comments on Special Effects of Document on Work

Broaden outlook

Research for teachers in district--ERIC has replaced professional library resources phased out through budget cuts

Overview of what is happening for practitioners in field of education

Regularly do computer searches and update them on annual or biannual basis

Resource document in subject file

Reference for work as psychologist

Added information (2)

Measurement

Helped local community

Looking for an appropriate test and it gave me a starting point

Library patrons are educators who need this kind of information

Cited a trend

Sharing, understanding with faculty

APPENDIX B-4 (continued)

Clarified teaching about criterion-referenced tests

Benchmark data for evaluation of internal situation

Used part of the information in a report I wrote

Raised the issue to conscious level with faculty

Self gratification; documented support

Improvement of work

For reference center

APPENDIX B-5

Respondents' Suggestions

1. ERIC is a blessing in keeping pace with educational developments; I don't know how one could operate without it.
2. The only problem or complaint that I have encountered with ERIC materials is that teachers would like to see less project or evaluation reports and more research-oriented materials.
3. Most of the information received did not apply to my area of teaching (Voc. Education). ERIC Clearinghouse on Vocational Education did meet my needs.
4. Report too technical--written for other researchers; need to get down to earth in terminology and educational settings.